DESCRIPTIONS OF SOME NEW GENERA AND SPECIES OF CANADIAN PROCTOTRUPIDÆ.

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The following paper is devoted to the description of new genera and species of parasitic Hymenoptera belonging to the family Proctotrupidæ, collected at Ottawa, Canada, by my esteemed friend, Mr. W. Hague Harrington, to whose liberality I am deeply indebted for sending me these and many other interesting forms in this family now in my collection.

Sub-family CERAPHRONINÆ.

The following table will be found useful to separate some forms closely allied to the genus *Megaspilus* Westwood.

Eyes	hairy.	

Metathorax not spined.

Wingless, or with rudimentary wings......

Winged; a large semi-circular stigma and a stigmal vein.

2. ¶ antennæ sub-clavate; ♂ unknown. Eumegaspilus, n. g. Mesothorax with only a median groove..... Megaspilidea, n. g. Megaspilodes Ashm.

The writer has recently characterized this genus elsewhere. It is at once distinguished from *Megaspilus* Westw. by having a blunt spine, or a bi-forked spine, in the middle of the metathorax. Two species pertain to it, viz., *Megaspilodes armatus* Say, and *M. fuscipennis* Ashm.

Megaspilus Westwood.

(1) Megaspilus Harringtoni, n. sp.

Male and female. Length .07 to .10 inch. Black; head and thorax finely reticulately sculptured; abdomen polished black. Antennæ 11-jointed, the scape and pedicel dull honey-yellow, the flagellum brownblack. Legs dull honey-yellow, the posterior femora obfuscated, the anterior and middle coxæ honey-yellow at apex, while the large posterior coxæ are black. Wings sub-hyaline, heavily pubescent, the large stigma and stigmal vein brown. The male differs from the female only in its smaller size, and is readily distinguished by its long, filiform antennæ, the

scape of which at apex and the flagellum, brown; the joints of the latter are about four times as long as thick.

Described from two specimens, male and female.

Eumegaspilus, n. g.

This genus is distinguished from *Megaspilus* Westwood in being entirely wingless or then with rudimentary wings, and by the shape of the flagellum, which is sub-clavate. In *Megaspilus* it is flagellate, i. e., tapers gradually to a point at apex.

(2) Eumegaspilus Canadensis, n. sp.

Female. Length .09 inch. Polished black; the head and thorax only showing a delicate, reticulated sculpture under a high power lens. On the head are a few large punctures, particularly on the vertex, two small foveæ or depressions on each side of front occllus; occiput prominently margined; eyes pubescent. The antennæ are 11-jointed, wholly brown-black; flagellum sub-clavate, the first funiclar joint longer than the pedicel, the others sub-equal but gradually widened, the terminal joint being the longest and thickest. Mesothorax with three grooves. Legs, including coxæ, of a uniform brownish-yellow. Abdomen highly polished with a depression near the base.

Described from one specimen.

(3) Eumegaspilus Ottawensis, n. sp.

This species is much like that just described, but it is more slender and more highly polished; the head is impunctured, while the scape at base, the pedicel, the 2nd, 3rd and 4th flagellar joints, and the legs, including the coxæ, are honey-yellow. The rudimentary wings are linear and reach not quite to the middle of the abdomen.

Described from one specimen.

Megaspilidea, n. g.

This genus is at once distinguished from the others by having but one groove on the mesothorax—the median one, the parapsidal grooves not being present; also by the difference in the flagellar joints.

(4) Megaspilidea minuta, n. sp.

Female. Length .04 inch. Head and thorax shining black, microscopically, reticulately sculptured. Eyes large oval, pubescent. Antennæ 11-jointed, scape ob-clavate, more than half the length of the flagellum; flagellum sub-clavate, first joint hardly half the length of pedicel, others

short, gradually widened toward tips, terminal joint very large and as long as the three preceding joints combined; scape yellowish at base and beneath, flagellum brown-black. Legs, including coxæ, brownish-yellow. Abdomen highly polished, smooth, excepting a few longitudinal lines near the base; the color above is black, excepting a large orange-colored blotch across the base; beneath, it is wholly brownish-yellow.

Described from two specimens.

Sub-family Scelioninæ.

Acolus Forster.

(5) Acolus Canadensis, n. sp.

Female. Length less than .03 inch. Black, shining, sparsely pubescent. Antennæ black, excepting the scape at base; the first and second funiclar joints are about as long as thick, third and fourth smaller and not as long as wide, club very large, joints not well separated. Scutellum sub-lunate. The legs, excepting the honey-yellow knees, are dark red. Abdomen broadly oval, the second segment occupying most of its surface, first segment with a transverse depression occupying nearly its whole width, striated and with a fringe of white hairs at base.

Described from one specimen.

(6) Acolus borealis, n. sp.

Female. Length .03 to .04 inch. Differs from A. Canadensis only in being relatively more robust, and in being distinctly, finely, confluently punctate; the lower part of face and the abdomen alone being smooth and shining. The antennæ are dark reddish brown. Legs uniformly red, while the abdomen is striated at base.

Described from four specimens.

Prosacantha Nees.

(7) Prosacantha brachyptera, n. sp.

Q. Length .03 inch. Black, shining. Thorax sub-opaque, microscopically punctate; metathorax with an acute spine on its disk. Antennæ brown-black. Legs red. Abdomen broadly oval, black, excepting the first segment, which is red and striated. Wings short, narrow, somewhat spatulate, not ciliated; the marginal vein long, black, the stigmal short, post-marginal vein wanting.

Described from three specimens.

This species comes nearest to P. minutissima Ashm., from which it is,

however, readily distinguished by the narrow, non-ciliated wings, and the color of the first abdominal segment.

Pentacantha, n. g.

This genus is closely related to *Prosacantha* Nees and *Trisacantha* Ashm.; but is at once separated from them by having five spines on the metathorax, three short ones on the disk and one long one on each side; and besides, there is a short, smooth, blunt horn at the base of first segment, partly prolonged over the metathorax. Its other characters are exactly as in *Prosacantha*. The blunt horn issuing from the base of first segment would seem to indicate a relationship with *Inostemma* Haliday, but that genus is in another sub-family.

(8) Pentacantha Canadensis, n. sp.

Female. Length .08 inch. Polished black; thorax opaque. Head smooth, except some lines back of eyes and on occiput. Antennæ 12-jointed, brown; first funiclar joint twice as long as the pedicel; second two thirds the length of first; third about as long as wide; fourth shorter than wide; club large, six-jointed. Thorax and scutellum rather coarsely rugose; no parapsidal grooves. Legs, including anterior coxæ, honey-yellow, middle of femora and tibiæ obfuscated. Abdomen polished black, the third segment longest and widest; first and second segments, and the third excepting on its disk, longitudinally striated. Wings dusky-hyaline, venation as in *Prosacantha*, veins rufo-piceous.

Described from one specimen.

Sub-family Platygasterinæ.

Metaclisis Forster.

(9) Metaclisis erythropus, n. sp.

Female. Length .08 inch. Black. Head opaque, coarsely rugose on vertex and back of eyes. Antennæ 10-jointed, the terminal joints of funicle enlarged into an irregularly rounded club; club six-jointed, filiform Thorax shining, finely reticulated or scaly; parapsidal grooves distinct, converging and meeting at the base of the scutellum. Legs red. Abdomen polished black. Wings dusky hyaline.

Described from one specimen.

Ectadius Forster.

(10) Ectadius Canadensis, n. sp.

Female. Length . 12 inch. Polished black. The head is delicately

transversely striated on vertex back of the ocelli and on the lower portion of the face. Antennæ reddish brown. Legs red, tarsi paler, yellowish. The thorax has two distinct parapsidal grooves and is delicately microscopically punctate. Metathorax, metapleuræ and base of abdomen densely pubescent. Abdomen polished black and prolonged into a long point posteriorly, being more than twice the length of the head and thorax combined. Wings hyaline.

Described from one specimen.

Sactogaster Forster.

(II) Sactogaster Howardii, n. sp.

Female. Length .07 inch Polished black, impunctured. Antennæ and legs dark red, the posterior femora obfuscated, tarsi paler. The scutellum is convexly high, striated and ends in a spine. The tail is nearly twice the length of the inflated venter. Metathorax and metapleuræ wrinkled. Wings hyaline. Hab.—Washington, D. C.

This species is described from one specimen taken by myself last summer, on the outskirts of Washington. It is dedicated to my friend, Mr. L. O. Howard, of the U. S. Dept. of Agriculture. Its much larger size, striated scutellum and longer tail will at once distinguish it from S. anomaliventris, described from Florida. In that species the scutellum is smooth, while the tail is not as long as the inflated venter.

Sub-family Diapriinæ.

Aneurhynchus Westwood.

(12) Aneurhynchus mellipes, n. sp.

Female. Length .10 inch. Black, shining, sparsely pubescent. Antennæ 12-jointed, red, stout, clavate; the scape is greatly thickened, a little shorter than half the length of the flagellum; pedicel thicker, but not half as long as the first funiclar joint; second shorter than the first, and the third shorter than the second; from thence the joints are shorter than wide and well separated. Parapsidal grooves distinct. Legs, including the coxæ, honey-yellow. Abdomen polished black, petiole rugose. Wings sub-hyaline, pubescent; the submarginal vein ends in a callosity and a short stigmal vein, but it does not reach the costal margin; the sub-marginal vein is very pale.

Described from one specimen.

Paramesius Westwood.

(13) Paramesius clavipes, n. sp.

Female. Length .08 inch. Polished black, covered with some long, sparse hairs on head, thorax and surrounding apex of abdomen; the metathorax, metapleuræ and abdominal petiole densely pubescent. Antennæ 13-jointed, red, gradually incrassated toward tips; first funiclar joint very slightly shorter than pedicel, following joints to fifth, sub-equal, from thence moniliform, slightly pedicellated, the terminal joint more than twice the length of the preceding joint, fusiform. Thorax without grooves, somewhat flat, sides compressed; collar red at sides. The abdomen is pointed ovate, a deep depression above near base, while the ovipositor is exserted between two short valves, probably unnaturally so. Legs red, the femora strongly clavate, the tarsi very long, the anterior and middle pairs being longer than their tibiæ. Wings sub-hyaline, the marginal vein but slightly developed, not longer than the very short stigmal vein.

Described from one specimen.

Loxotropa Forster.

(14) Loxotropa pezomachoides, n. sp.

Female. Length .04 to .05 inch. A small, highly polished, black, apterous species, sparsely covered with some long hairs. The antennæ and legs dark red. Antennæ 12-jointed, moniliform, the four terminal joints being much widened and slightly pedicellated, the last joint of which is large, fusiform.

Described from six specimens.

(15) Loxotropa Harringtoni, n. sp.

Female. Length .04 inch. Black, polished, covered with some long, sparse hairs. The collar at sides, metathorax and abdominal petiole well covered with dense, white pubescence. Antennæ 12-jointed, dark red, the four terminal joints abruptly larger than the preceding, and the species may be readily known by this character, and by the last funiclar joint being a little longer and more slender than the preceding one. The legs, including all coxæ, red. Abdomen clavate, the ovipositor slightly exserted. Wings dusky-hyaline, heavily pubescent and ciliate; the marginal vein hardly developed, thickened.

Described from one specimen.

(16) Loxotropa armata, n. sp.

Female. Length .07 inch. This species is very closely related to

L. Harringtoni, agreeing with it in color, wing characters, etc., but it is much larger, the antennæ much more incrassated toward apex, the terminal joint being very large and thick, and as long as the three preceding joints combined; these four terminal joints, which constitute the club, are as usual slightly pedicellate. Another character which will readily distinguish it from all other species is a short conical spine in the centre of the metathorax.

Described from one specimen.

(17) Loxotropa abrupta Thompson.

This European species must now be added to our fauna, Mr. Harrington having taken a specimen in Canada which I am unable to separate from types from Europe in my collection.

Monelata Forster.

(18) Monelata hirticollis, n. sp.

Stature and size of *M. mellicollis* Ashm., but differs in being entirely black; the collar, metathorax and petiole densely pubescent; antennæ dark red, the very large terminal joint nearly black, while the legs are reddish-yellow. Wings hyaline, ciliate.

Described from one specimen.

Sub-family Belytine.

Zygota Forster.

(19) Zygota Americana, n. sp.

Female. Length .14 inch. Polished black, covered with a fulvous pubescence. Antennæ 15-jointed, filiform-moniliform; first funiclar joint twice longer than the pedicel, other joints almost round, sub-pedicellate. Parapsidal grooves of mesonotum broad, distinct. Scutellum with a deep depression at base. Metathorax carinated. Legs, including all coxæ, honey-vellow; first tarsal joint of anterior legs long, deeply emarginate at base. Abdomen ovate, black, a lateral streak on the apex of sixth segment red; venter densely pubescent; petiole twice as long as wide, fluted. Wings fusco-hyaline, pubescent; veins brown, the marginal cell not quite closed.

Male. Length .12 inch. This may be distinguished from the female principally by the antennæ. They are 14-jointed, long, filiform, pubescent, pedicel rounded, the first funiclar joint about five times as long as thick, excised at base, the following joints about four times as long as

thick. There is a tooth beneath anterior femora, near the base; while the anterior tibiæ are peculiarly twisted, the twisted part ending in a spine, besides the apical tibial spine. Otherwise as in the female.

Described from one male and one female specimen.

AN INTERESTING NEW CHALCID FROM CANADA.

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Among a small collection of parasitic Hymenoptera sent me by Mr. James Fletcher, the Dominion Entomologist, for names, I found an interesting Chalcid belonging to that remarkable Pteromalid genus *Caratomus* Dalman, no species of which has as yet been described as occurring in our fauna; and as the present species seems to be distinct from the European species, *Caratomus megacephalus* Dalm., I believe it to be undescribed, and submit herewith the following description:

Caratomus leucophthalmus, n. sp.

Length .10 inch. Robust, blue-black, confluently, granulately The head is very large, its breadth being nearly twice the width of the thorax when measured from eye to eye; its front is deeply, broadly emarginated, and there is a deep emargination or broad groove extending from the eye obliquely towards the mouth, the upper edge of which forms an acute tubercle, while the lower edge forms an acute ridge The eyes are satiny white, finely pubescent. The antennæ are 13-jointed, clavate; scape, the long pedicel, and first and second funiclar joints brownish-yellow, the following joints brown. The legs are red, excepting the trochanters, extreme tips of femora and tibiæ and the anterior tibiæ, which are wholly brownish-yellow. The abdomen is oval, with a dull bronzy tinge; petiole short, yellow. The wings are hyaline with a large fuscous blotch across the middle; veins thick, rufo-piceous; the submarginal vein is distant from costal edge and nearly three times as long as the marginal vein; the stigmal vein is about as long as the marginal, curved; while the post-marginal is distinctly longer than the stigmal vein.

Described from one male specimen taken on a window at Ottawa, in 1885, by Mr. James Fletcher.